Claims

What is claimed is:

- 1 1. In a computer controlled user interactive display
- 2 system, a display interface implementation for directing
- 3 a user's attention to specific selectable items on a
- 4 display screen with crowded selectable items comprising;
- 5 user controlled means for moving an on-screen
- 6 pointer to approach said selectable items; and
- 7 means for highlighting all items in any set of a
- 8 plurality of said items wherein each item in the set is
- 9 within a predetermined distance of said approaching
- 10 pointer.
 - 1 2. The computer controlled user interactive display
 - 2 system of claim 1 wherein said selectable items are
 - 3 icons.
 - 1 3. The computer controlled user interactive display
 - 2 system of claim 2 further including means for ending said
 - 3 highlighting of each of said highlighted icons when the
 - 4 pointer moves outside of said predetermined distance
 - 5 for said icon.
 - 1 4. The computer controlled user interactive display
 - 2 system of claim 2 further including means for ending said
 - 3 highlighting of each of said highlighted icons after a
 - 4 predetermined period of time.
 - 1 5. The computer controlled user interactive display
 - 2 system of claim 2 wherein said means for highlighting
 - 3 sequentially highlight each icon in said set.

- 1 6. The computer controlled user interactive display
- 2 system of claim 2:
- 3 wherein said means for sequentially highlighting
- 4 said set of icons highlight each icon in the set for a
- 5 defined period of time; and
- further including means for enabling the user
- 7 selection of each sequentially highlighted item during
- 8 said period of time.
- 1 7. The computer controlled user interactive display
- 2 system of claim 6 wherein the icons in said set overlap
- 3 each other.

- 1 8. A method for directing a user's attention to specific
- 2 selectable items on a display screen with crowded
- 3 selectable items in computer controlled user interactive
- 4 display systems comprising:
- 5 moving an on-screen pointer to approach said
- 6 selectable items; and
- 7 highlighting all items in any set of a plurality of
- 8 said items wherein each item in the set is within a
- 9 predetermined distance of said approaching pointer.
- 1 9. The method of claim 8 wherein said selectable items
- 2 are icons.
- 1 10. The method of claim 9 further including the step of
- 2 ending said highlighting of each of said highlighted
- 3 icons when the pointer is moved outside of said
- 4 predetermined distance for said icon.
- 1 11. The method of claim 9 further including the step of
- 2 ending said highlighting of each of said highlighted
- 3 icons after a predetermined period of time.
- 1 12. The method of claim 9 wherein said step of
- 2 highlighting sequentially highlights each item in said
- 3 set.
- 1 13. The method of claim 9 wherein said step of
- 2 sequentially highlighting said set of icons highlight
- 3 each icon in the set for a defined period of time; and
- 4 further including the step of enabling the user
- 5 selection of each sequentially highlighted item during
- 6 said period of time.

- 1 14. The method of claim 13 wherein the icons in said set
- 2 overlap each other.

- 1 15. A computer program having program code included on a
- 2 computer readable medium for directing a user's attention
- 3 to specific selectable items on a display screen with
- 4 crowded selectable items in computer controlled user
- 5 interactive display systems comprising:
- 6 user controlled means for moving an on-screen
- 7 pointer to approach said selectable items; and
- 8 means for highlighting all items in any set of a
- 9 plurality of said items wherein each item in the set is
- 10 within a predetermined distance of said approaching
- 11 pointer.
 - 1 16. The computer program of claim 15 wherein said
 - 2 selectable items are icons.
 - 1 17. The computer program of claim 16 further including
 - 2 means for ending said highlighting of each of said
 - 3 highlighted icons when the pointer moves outside of said
 - 4 predetermined distance for said icon.
- 1 18. The computer program of claim 16 further including
- 2 means for ending said highlighting of each of said
- 3 highlighted icons after a predetermined period of time.
- 1 19. The computer program of claim 16 wherein said means
- 2 for highlighting sequentially highlights each icon in
- 3 said set.

- 1 20. The computer program of claim 16 wherein said means
- 2 for sequentially highlighting said set of icons highlight
- 3 each icon in the set for a defined period of time; and
- further including means enabling the user selection
- 5 of each sequentially highlighted item during said period
- 6 of time.
- 1 21. The computer program of claim 20 wherein the icons
- 2 in said set overlap each other.

- In a computer controlled user interactive display 1 22. system, a display interface implementation for directing 2 3 a user's attention to specific selectable items on a 4 display screen with crowded selectable items comprising; 5 user controlled means for moving an on-screen 6 pointer to approach a cluster of said selectable items; 7 and 8 means for sequentially highlighting each item in 9 said cluster when said approaching pointer is within a
- 10 predetermined distance from said cluster.

1	23.	In a	computer	controlled	user	interactive	display
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- 2 system, a display interface implementation for directing
- 3 a user's attention to specific selectable items on a
- 4 display screen with crowded selectable items comprising:
- 5 user controlled means for moving an on-screen
- 6 pointer to approach a cluster of said selectable items;
- means for determining whether the items in said
- 8 cluster have sufficient separation for said pointer to
- 9 select separate items in said cluster; and
- 10 means responsive to said determining means for
- 11 sequentially highlighting each item in said cluster when
- 12 there is insufficient separation.
 - 1 24. The computer controlled user interactive display
 - 2 system of claim 23 wherein each item is activated for
 - 3 selection when highlighted.

distance from said cluster.

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said selectable items; and sequentially highlighting each item in said clus	L	25. A method for directing a user's attention to
interactive display systems comprising: moving an on-screen pointer to approach a cluste said selectable items; and sequentially highlighting each item in said cluster	2	specific selectable items on a display screen with
moving an on-screen pointer to approach a cluster said selectable items; and sequentially highlighting each item in said clusters.	3	crowded selectable items in computer controlled user
said selectable items; and sequentially highlighting each item in said clus	1	interactive display systems comprising:
sequentially highlighting each item in said clus	5	moving an on-screen pointer to approach a cluster of
	5	said selectable items; and
when said approaching pointer is within a predeterming	7	sequentially highlighting each item in said cluster
	3	when said approaching pointer is within a predetermined

- 1 26. A method for directing a user's attention to
- 2 specific selectable items on a display screen with
- 3 crowded selectable items in computer controlled user
- 4 interactive display systems comprising:
- 5 moving an on-screen pointer to approach a cluster of
- 6 said selectable items;
- 7 determining whether the items in said cluster have
- 8 sufficient separation for said pointer to select separate
- 9 items in said cluster; and
- sequentially highlighting each item in said cluster
- 11 responsive to a determination that there is insufficient
- 12 separation.
 - 1 27. The method of claim 26 wherein each item is
 - 2 activated for selection when highlighted.

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Τ	28. A computer program having program code included on a
2	computer readable medium for directing a user's attention
3	to specific selectable items on a display screen with
4	crowded selectable items in computer controlled user
5	interactive display systems comprising:
6	user controlled means for moving an on-screen

7 pointer to approach a cluster of said selectable items; 8 and

means for sequentially highlighting each item in said cluster when said approaching pointer is within a predetermined distance from said cluster.

1	29.	Α	computer	program	having	program	code	included	on	δ
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- 2 computer readable medium for directing a user's attention
- 3 to specific selectable items on a display screen with
- 4 crowded selectable items in computer controlled user
- 5 interactive display systems comprising:
- 6 user controlled means for moving an on-screen
- 7 pointer to approach a cluster of said selectable items;
- means for determining whether the items in said
- 9 cluster have sufficient separation for said pointer to
- 10 select separate items in said cluster; and
- means responsive to said determining means for
- 12 sequentially highlighting each item in said cluster when
- 13 there is insufficient separation.
 - 1 30. The computer program of claim 29 wherein each item
 - 2 is activated for selection when highlighted.